

IN THE CLAIMS

Please cancel claims 13-19 and 21-31 without prejudice, and without dedication or abandonment of the subject matter thereof.

1. (Previously presented) An air bag apparatus for shielding a vehicle occupant in the event of a side crash, said air bag apparatus comprising:

an acceleration sensor which detects acceleration in a side direction larger than a predetermined value to generate a detection signal;  
an inflater which generates a gas in response to said detection signal; and  
an air bag which is folded initially, and expands with said gas, wherein said air bag comprises a main section having one end which receives gas from said inflater and a protrusion section which is provided attached to and extending outwardly away from a tip portion of said main section such that an inner space of said protrusion section is connected with an inner space of said main section, said tip portion being disposed at an opposite end of the main section from said one end, said protrusion section extending substantially tangentially to the tip portion of said main section in a direction orthogonal to an expansion direction of the air bag and having at least one opening formed therein from which said gas is spouted.

2. (Previously presented) The air bag apparatus according to claim 1, wherein said protrusion section extends beyond said main section and comprises a pipe shape with openings formed therein at opposing ends thereof.

3. (Previously presented) The air bag apparatus according to claim 1, wherein said protrusion section is narrower than said tip portion of said main section and said at least one opening is formed in a portion thereof connected with and spaced away from said main section by an

intermediate portion of the protrusion section.

4. (Previously presented) The air bag apparatus according to claim 1, wherein said protrusion section is pushed into the inner space of said main section prior to expansion.

5. (Previously presented) An air bag apparatus for shielding a vehicle occupant in the event of a side crash, said air bag apparatus comprising:

an acceleration sensor which detects acceleration in a side direction larger than a predetermined value to generate a detection signal;

an inflater which generates a gas in response to said detection signal; and

an air bag which is folded initially, and expands with said gas, wherein said air bag comprises a main section having one end which receives gas from said inflater and a protrusion section which is provided attached to and extending outwardly away from a tip portion of said main section such that an inner space of said protrusion section is connected with an inner space of said main section, said tip portion being disposed at an opposite end of the main section from said one end, said protrusion section extending substantially tangentially to the tip portion of said main section in a direction orthogonal to an expansion direction of the air bag and having at least one opening formed therein from which said gas is spouted;

wherein said protrusion section is pushed into the inner space of said main section prior to expansion such that said protrusion section is turned inside out.

6. (Previously presented) The air bag apparatus according to claim 1, wherein said main section comprises first and second side panels, which are sewed in a limb portion for contacting a limb of a vehicle occupant, such that outer surfaces of said first and second side panels are

joined to each other.

7. (Previously presented) The air bag apparatus according to claim 1, wherein said main section comprises first and second side panels, and further wherein said air bag has at least one partition provided between said side panels in said inner space of said main section.

8. (Original) The air bag apparatus according to claim 7, wherein said at least one partition is formed by sewing a predetermined portion of said first and second side panels.

9. (Previously presented) The air bag apparatus according to claim 8, wherein said predetermined portion is shaped as one of a curved line, a circle or a semicircle.

10. (Previously presented) The air bag apparatus according to claim 8, wherein each said predetermined portion is substantially linear or S-shaped.

11. (Previously presented) The air bag apparatus according to claim 8, including multiple said partitions defined by respective predetermined portions and wherein said predetermined portions are shaped differently from each other.

12. (Previously presented) The air bag apparatus according to claim 8, wherein said predetermined portion determines an expansion direction of said air bag during an expanding process.

Claims 13-19 (Canceled)

20. (Previously presented) An air bag used for an air bag apparatus for shielding a vehicle occupant in the event of a side crash, said air bag comprising:

    a main section having one end which receives gas from an inflator; and  
    a protrusion section which is attached to and extends outwardly away from a tip portion of said main section in an expanded configuration of said air bag such that an inner space of said protrusion section is connected with an inner space of said main section,

    wherein said air bag is folded initially, and expands with the gas from the inflator, said tip portion being disposed at an opposite end of the main section from said one end, and said protrusion section extends substantially tangentially to the tip portion of said main section in a direction orthogonal to an expansion direction of the air bag and has at least one opening formed therein from which said gas is spouted.

21. (Previously presented) The air bag according to claim 20, wherein said protrusion section extends outwardly beyond the main section and comprises a pipe shape with openings formed therein at opposing ends therof.

22. (Previously presented) The air bag according to claim 20, wherein said protrusion section is narrower than said tip portion and has at least one opening in a portion thereof connected with said main section and spaced away therefrom by an intermediate portion of the protrusion section, and wherein upon deployment of said air bag, gas is expelled from said opening in a direction substantially perpendicular to a substantially linear expansion direction.

23. (Previously presented) The air bag according to claim 20, wherein said protrusion section is pushed into the inner space of said main section prior to expansion.

24. (Previously presented) An air bag for use in an air bag apparatus to shield a vehicle occupant in the event of a side crash, said air bag comprising:

a main section having one end which receives gas from an inflator; and  
a protrusion section which is attached to and extends outwardly away from a tip portion of said main section in an expanded configuration of said air bag such that an inner space of said protrusion section is connected with an inner space of said main section,

wherein said air bag is folded initially, and expands with the gas from the inflator, said tip portion being disposed at an opposite end of the main section from said one end, and said protrusion section extends substantially tangentially to the tip portion of said main section in a direction orthogonal to an expansion direction of the air bag and has at least one opening formed therein from which said gas is spouted;

wherein said protrusion section is pushed into the inner space of said main section prior to expansion such that said protrusion section is turned inside out.

Claims 25-31 (Canceled)